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Substitute for form 1449A/PTO		Compl't if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	Not Yet Assigned 10/148899
(use as many sheets as necessary)		Filing Date	HEREWITH 12/29/03
		First Named Inventor	HUIBERS
		Art Unit	Not Yet Assigned 2873
		Examiner Name	Not Yet Assigned D. SPECTOR
Sheet	1	of	5
		Attorney Docket Number	P142-US

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
DNS	AA	US- 3,517,126	06-23-1970	Yamada et al.	
	AB	US- 3,553,364	01-05-1971	Lee	
	AC	US- 3,600,798	08-24-1971	Lee	
	AD	US- 3,678,196	07-18-1972	Roth	
	AE	US- 3,746,785	07-17-1973	Goodrich	
	AF	US- 3,746,911	07-17-1973	Nathanson et al.	
	AG	US- 3,886,310	05-27-1975	Guldberg et al.	
	AH	US- 4,229,732	10-21-1980	Hartstein et al.	
	AI	US- 4,356,730	11-02-1982	Cade	
	AJ	US- 4,383,255	05-10-1983	Grandjean et al.	
	AK	US- 4,403,248	09-06-1983	Te Velde	
	AL	US- 4,492,435	01-08-1985	Banton et al.	
	AM	US- 4,556,935	01-28-1986	Hombeck	
	AN	US- 4,571,603	02-18-1986	Hombeck et al.	
	AO	US- 4,592,628	06-03-1986	Altman et al.	
	AP	US- 4,596,992	06-24-1986	Hombeck	
	AQ	US- 4,662,746	05-05-1987	Hombeck	
	AR	US- 4,680,579	07-14-1987	Ott	
	AS	US- 4,698,602	10-06-1987	Armitage	
	AT	US- 4,710,732	12-01-1987	Hombeck	

FOREIGN PATENT DOCUMENTS

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5114104

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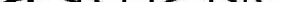
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		Number - Kind Code ² (if known)	MM-DD-YYYY		
DHS	AU	US- 4,786,149	11-22-1988	Hoening et al.	
	AV	US- 4,805,038	02-14-1989	Seligson	
	AW	US- 4,954,789	09-04-1990	Sampsell	
	AX	US- 4,956,619	09-11-1990	Hombeck	
	AY	US- 4,998,262	03-05-1991	Wiggers	
	AZ	US- 5,061,049	10-29-1991	Hombeck	
	BA	US- 5,078,479	01-07-1992	Villeumier	
	BB	US- 5,085,497	02-04-1992	Um et al.	
	BC	US- 5,196,767	03-23-1993	Leard et al.	
	BD	US- 5,216,537	06-10-1993	Hombeck	
	BE	US- 5,287,215	02-15-1994	Warde et al.	
	BF	US- 5,311,360	05-10-1994	Bloom et al.	
	BG	US- 5,416,514	05-16-1995	Janssen et al.	
	BH	US- 5,442,414	08-15-1995	Janssen et al.	
	BI	US- 5,444,566	08-22-1995	Gale et al.	
	BJ	US- 5,448,314	09-05-1995	Heimbuch et al.	
	BK	US- 5,452,024	09-19-1995	Sampsell	
	BL	US- 5,471,341	11-28-1995	Warde et al.	
	BM	US- 5,493,439	02-20-1996	Engle	
	BN	US- 5,508,738	04-16-1996	Janssen et al.	

FOREIGN PATENT DOCUMENTS

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Substitute for form 1449A/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	Not Yet Assigned <i>10742899</i>
		Filing Date	HEREWITH <i>12/29/03</i>
		First Named Inventor	HUIBERS-
		Art Unit	Not Yet Assigned <i>2873</i>
		Examiner Name	Not Yet Assigned <i>D SPATOK</i>
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		Attorney Docket Number	P142-US

U.S. PATENT DOCUMENTS

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DRS	BO	US- 5,535,047	07-09-1996	Hornbeck	
	BP	US- 5,552,925	09-03-1996	Worley	
	BQ	US- 5,557,177	09-17-1996	Engle	
	BR	US- 5,567,334	10-22-1996	Baker et al.	
	BS	US- 5,579,149	11-26-1996	Moret et al.	
	BT	US- 5,579,151	11-26-1996	Cho	
	BU	US- 5,583,688	12-10-1996	Hornbeck	
	BV	US- 5,631,782	05-20-1997	Smith et al.	
	BW	US- 5,636,070	06-03-1997	Ji et al.	
	BX	US- 5,669,687	09-23-1997	Yang	
	BY	US- 5,677,784	10-14-1997	Haris	
	BZ	US- 5,706,061	01-06-1998	Marshall et al.	
	CA	US- 5,768,009	06-16-1998	Little	
	CB	US- 5,774,196	06-30-1998	Marshall	
	CC	US- 5,784,190	07-21-1998	Worley	
	CD	US- 5,808,780	09-15-1998	McDonald	
	CE	US- 5,835,256	11-10-1998	Huibers	
	CF	US- 5,926,309	07-20-1999	Little	
	CG	US- 5,999,306	12-07-1999	Atobe et al.	
	CH	US- 6,046,840	04-04-2000	Huibers	

FOREIGN PATENT DOCUMENTS

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				First Named Inventor	HUIBERS
				Art Unit	Not Yet Assigned 2873
				Examiner Name	Not Yet Assigned D. SPECIA
Sheet	4	of	5	Attorney Docket Number	P142-US

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				First Named Inventor	HUIBERS
				Group Art Unit	Not Yet Assigned 2873
				Examiner Name	Not Yet Assigned D. Specter
				Attorney Docket Number	P142-US
Sheet	5	of	5		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
DS	DA	JAECKLIN, "Line-Addressable Torsional Micromirrors for Light Modulator Arrays", Sensor and Actuators A, 41-42, Elsevier Science, pp. 324-329.	
DS	DB	GERHARD-MULTHAUPT et al., "Light-Valve Projection Displays - An Introduction", Displays, Vol. 16, No. 1, 1995, Elsevier Science B.V., pp. 5-7.	
DS	DC	GERHARD-MULTHAUPT, "Light-Valve Technologies for High-Definition Television Projection Displays", Displays, 1991, Vol. 12, No. 3/4, pp. 115-128.	
DS	DD	PETERSON, K.E., "Micromechanical Light Modulator Array Fabricated on Silicon", Applied Physics Letters, American Institute of Physics, Vol. 31 No. 8, 15 October 1977, pp. 521-523.	
DS	DE	CADMAN et al., "New Micromechanical Display Using Metallic Thin Films", IEEE Electron Device Letters, Jan. 1983, Vol. EDL-4 No.1, pp. 3-4.	
DS	DF	THOMAS et al., "The Mirror Matrix Tube: A Novel Light Valve for Projection Displays", IEEE Transactions on Electron Devices, Vol. Ed-22 No.9, September 1975, pp. 765-775.	
DS	DG	HORNBECK, "Digital Light Processing (TM) for High-Brightness, High Resolution Applications", Texas Instruments, Inc., date unknown, pp. 1-14.	
DS	DH	YODER, "The Digital Display Technology of the Future", Texas Instruments, Inc., date unknown, pp. 1-11.	
DS	DI	PETERSON, "Silicon Torsional Scanning Mirror", IBM J. Res. Develop., Vol. 24 No. 5, September 1980 pp. 631-637.	

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